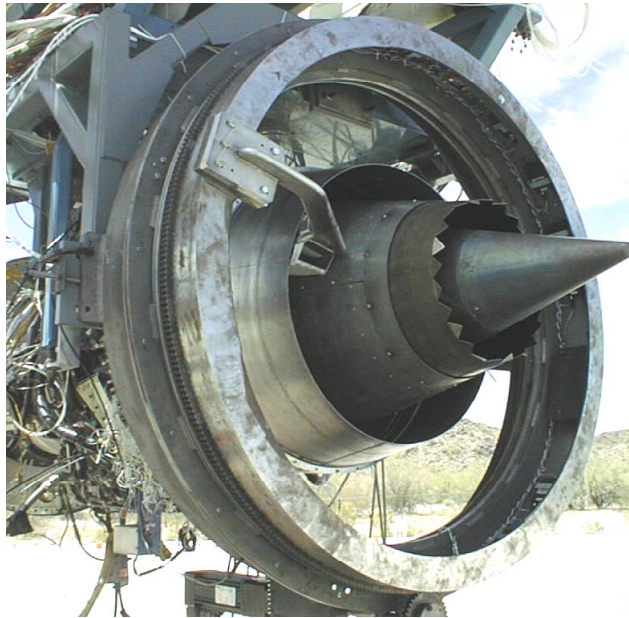


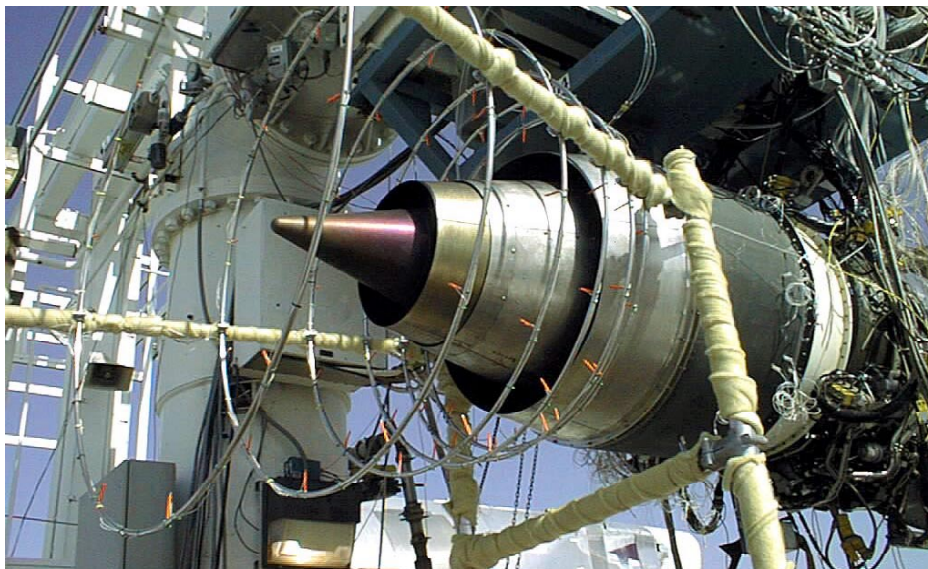
## Honeywell Engines and Systems

Contact: [don.weir@honeywell.com](mailto:don.weir@honeywell.com)

NASA Glenn, NASA Langley, Honeywell, and Boeing conducted acoustic modal measurements in the aft-fan duct of a Honeywell TFE731-60 engine as part of the NASA Engine Validation of Noise Reduction Concepts. Three innovative measurements techniques were applied: the aft duct rotating rake from NASA Glenn, 63 in-duct microphones in 3 cylindrical and 1 spiral array from NASA Langley, and a external “cage array” with 103 microphones from Boeing.



NASA Glenn aft-rotating rake installed on a Honeywell TFE731-60 engine.



Boeing cage array behind the Honeywell TFE731-60 engine with NASA Langley aft fan duct Kulites installed.